

BIO-SIL

Antifoams & Emulsions

BIO-SIL Sil-Thread Emulsion

Sil-thread Emulsion

TECHNICAL DATA SHEET

Rev.4 Date: 02/02/2016

PRODUCT DESCRIPTION

Is a specially formulated silicone oil/wax emulsion with additives suitable for cotton thread and yarn lubrication for stitching and embroidering machines. It reduces static and heat built up during processing. Aids manufacturing by effectively reducing breakages, enabling increased machine speeds, and improved productivity.

PRODUCT CHARACTERISTICS

Emulsifier type	An-ionic
Typical silicone content%	40
Typical wax content%	9
Viscosity of contained oil @25C (77F) (cSt)	1000
Specific gravity kg/litre	0.95
Total solids	>49
Colour	off white to beige
Diluent(s)	Water
*%Total Solids	% of nonvolatile material in the emulsion.
Religious Status	Halaal Certified (By SANHA-South African National Halaal Authority) to be able to apply to any garments including religious gear.

FINAL PROPERTIES

- Upon evaporation, the product will form a thin film of silicone oil and wax.

LEGAL DISCLAIMER: Each user bears the full responsibility for making its own determination as to the suitability of Supplier material, products, services, recommendations or advice for its own particular purposes. Each user must identify and perform test and analysis sufficient to assure its finished parts will be safe and suitable for use under end-use conditions. Because actual use of products by the user is beyond the control of Supplier, such use is within the exclusive responsibility of the user, and supplier cannot be held responsible for any loss incurred through incorrect or faulty use of the products. Further, no statement contained herein concerning a possible or suggested use of any material product, service or design is intended or should be construed to grant any license under any patent or other intellectual property right of Supplier or any of its subsidiaries or affiliated companies, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

USAGE GUIDE

- Typically used at a concentration of 75 to 80% silicone. A 75% silicone concentration is an excellent starting point for evaluating these products in new applications.

KEY PERFORMANCE PROPERTIES

- Excellent thread and yarn lubricant
- Ease of sewing
- High-temperature stability of silicone fluid and wax
- Low volatility of silicone fluid and wax
- Chemically inert
- Water dispersible

TEXTILES

- Anti-Crocking
- Fiber & Thread Lubricants
- Softeners & Modifiers

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HARD WATER DILUTION

Silicone/wax emulsions are generally stable in hard water. However, should the water supply be of 200-ppm hardness or higher, softened water or boiler condensate is recommended as a diluents. Dilution of the emulsion with water may result in the need for additional bactericide or fungicide to counteract possible microbial activity. It is recommended that each user evaluate the diluted emulsion before putting it into use.

Depending on the specific applications and dilution level, it may be necessary to use additional biocide or fungicide in the diluted product. Silicone emulsions are shipped with sufficient bactericide for preservation. Shipments of emulsions with sufficient biocide for all dilution levels in all applications are not feasible. Therefore, it is recommended that each user evaluate whether it is necessary to add additional biocide to diluted products.

FREEZE/THAW STABILITY

If a container of emulsion is frozen and then properly thawed, there should be no detrimental effect relative to the subsequent performance of the product. 'Properly thawed' means that the emulsion has completely melted (at less than 66°C) to a liquid state before any agitation of the product is attempted. If the sample is of uniform appearance, the emulsion may be suitable for use. If the emulsion is not uniform, it probably will not be suitable for use.

HANDLING & SAFETY

Material Safety Data Sheets are available upon request from Silicone & Technical Products Pty (Ltd).

STORAGE & WARRANTY PERIOD

The warranty period is 12 months from date of manufacture from Silicone & Technical Products Pty (Ltd) if stored in the original unopened shipping container at above freezing temperatures. Recommended extended storage container conditions: 4°C to 27°C.

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